



Intel® Solid-State Drive

Installation Guide



This guide explains how to install an Intel® Solid-State Drive (Intel® SSD) in a SATA-based desktop or notebook computer.

The instructions include migrating your data from your current storage device (such as a hard disk drive) to your new Intel SSD using Intel® Data Migration Software.

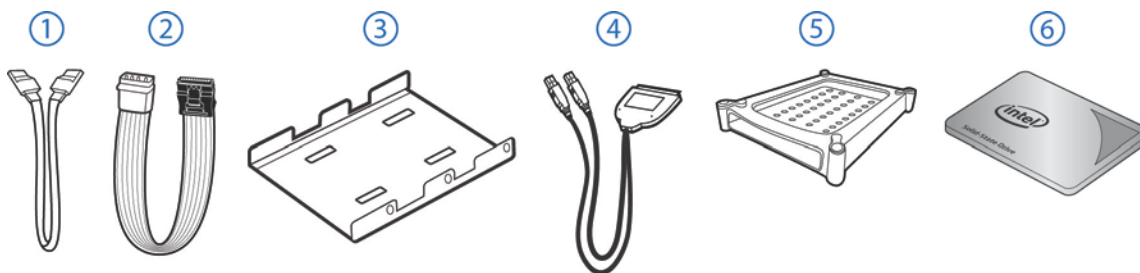
Overview

Installing an Intel SSD consists of four main steps:

1. Connect the Intel SSD to your computer.
2. Migrate your data from your current storage device to your new Intel SSD.
3. Swap the placement of your current storage device with your new Intel SSD.
4. Optimize and maintain your new Intel SSD with the Intel® SSD Toolbox software.

Before You Begin

- Download and save the Intel Data Migration Software to your current storage device:
<http://www.intel.com/go/ssdinstallation>
- Confirm you have the necessary hardware for installation:



Hardware item

1. SATA-to-SATA interface cable
2. SATA power adapter
3. 3.5-inch mounting adapter and screws
4. USB-to-SATA cable
5. Drive sleeve
6. Spacer

Required for

- Desktop computers
- Desktop computers without a SATA power cable
- Desktop computers with 3.5-inch drive bay
- Notebook computers
- Notebook computers (optional - for use with your old storage device after the SSD is installed)
- Notebook computers with 9.5mm drive bays

Note: Contents vary based on package purchased.



SSD Handling Precautions

Observe the following before beginning the installation:

- Keep the SSD in the protective anti-static container until you are ready to install.
- Handle the SSD with care. Do not touch the gold connectors.
- To minimize static electricity, touch the computer case before handling the SSD.
- Do not remove the encasement or disassemble the SSD; these actions void the SSD warranty.

1. Connect the Intel® SSD to Your Computer

This step explains how to connect the Intel SSD to your computer in preparation for migrating your data. Note that your current storage device remains installed until the final step of the installation, [“Swap Your Drives” on page 8](#).

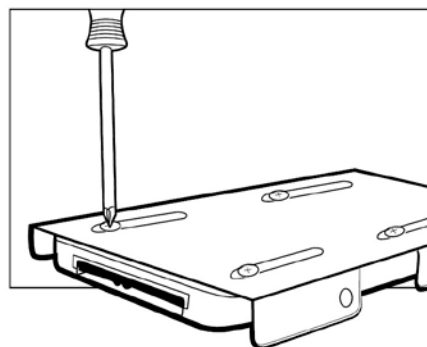
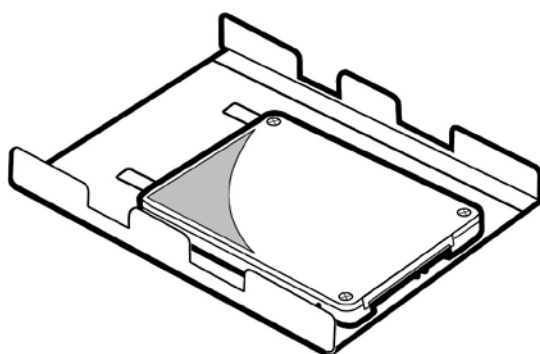
Follow the steps for your platform:

- [“Desktop Computers”](#) (next section)
- [“Notebook Computers” on page 4](#)

Desktop Computers

1. If your desktop computer has a 3.5-inch drive bay, attach the Intel SSD to the mounting adapter. (This helps the SSD fit securely in a drive bay.) If your desktop computer has a 2.5-inch drive bay, you do not need to attach the mounting adapter. Go to step 2 in this section.
 - a. With the SSD right side up (Intel logo showing), place the Intel SSD on the mounting adapter. Make sure the edge of the Intel SSD (with connectors) aligns with the edge of the mounting adapter. See [Figure 1](#).
 - b. Turn the SSD and mounting adapter over and insert one screw in each mounting hole on the bottom of the mounting adapter. See [Figure 1](#).

Figure 1 Place and attach Intel SSD on mounting adapter



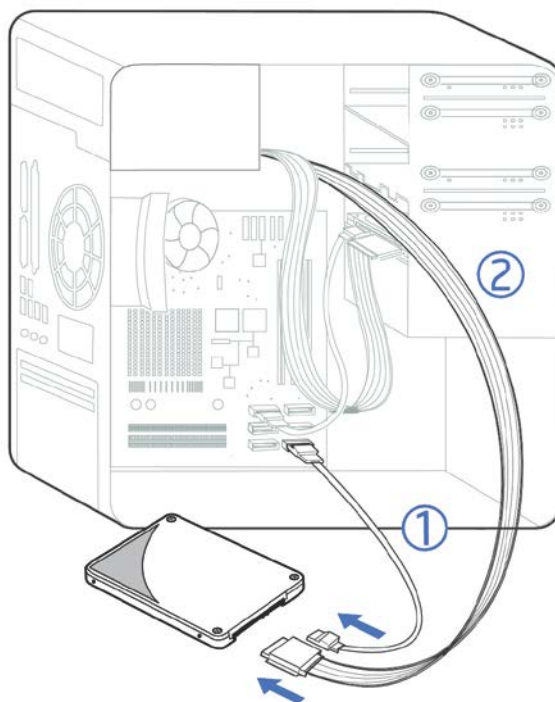
2. Power off the computer. Keep the power cable connected.
 3. Remove the computer case.

Refer to your computer documentation to determine how to safely remove the computer case.
 4. Connect one end of the SATA-to-SATA interface cable to a SATA interface connector or SATA host adapter on your computer motherboard and connect the other end to the Intel SSD. See [Figure 2](#).
- Note:** The SATA cable connectors are keyed to ensure correct orientation and contain a locking bracket for securing in place. Insert cables gently. Do not use excessive force.

5. Locate an available SATA power cable (connected to the internal computer power supply) and connect it to the Intel SSD. See [Figure 2](#).

Note: Most computers have an available SATA power cable. If your computer does not have a SATA power cable and instead uses a 4-pin power connector, use a SATA power adapter. (The SATA power adapter comes with certain packages or can be purchased separately.)

Figure 2 Connect SATA interface and power cables



1. SATA-to-SATA interface cable: Connect to SATA interface connector on computer motherboard and to Intel SSD.
 2. SATA power cable (or SATA power adapter): Connect from power supply to Intel SSD.
6. Slide the connected Intel SSD with mounting adapter into an available 3.5-inch drive bay, or secure the Intel SSD to the computer by inserting one screw in each of the side-mounting or bottom-mounting holes.
 7. Power on the computer and wait for the operating system to recognize the Intel SSD.
A message appears when the SSD is recognized. The Intel SSD is now connected. Proceed to ["Migrate Your Data" on page 5](#).

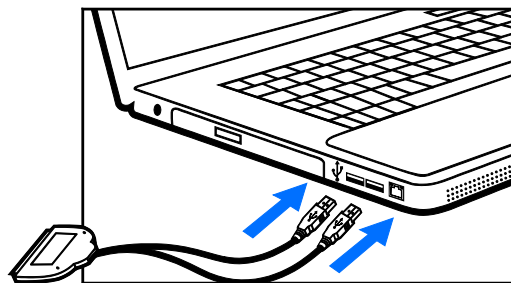


Notebook Computers

1. Connect the dual end of a USB-to-SATA cable to two available USB ports on the computer. See [Figure 3](#). You do not have to power off the computer.

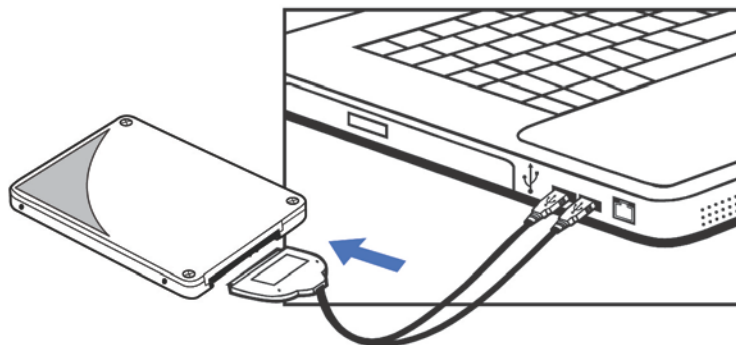
Note: If your computer contains a USB 3.0 port (indicated with a blue connector), connect the blue end of the USB-to-SATA cable to the USB 3.0 port. If your computer does not contain a USB 3.0 port, you can connect the cable to any USB port.

Figure 3 Connect USB-to-SATA cable to notebook



2. Connect the single end of the USB-to-SATA cable to the Intel SSD. See [Figure 4](#).

Figure 4 Connect USB-to-SATA cable to Intel SSD



3. Power on the computer, if necessary, and wait for the operating system to recognize the Intel SSD.

A message appears when the operating system recognizes the Intel SSD.

Note: SATA devices may draw more power than some systems are capable of delivering through USB ports. If the Intel SSD is not recognized, remove other USB devices (external keyboards, printers, mice, scanners, etc). Keep these devices removed until you have finished migrating your data from the old storage device to the Intel SSD. In some cases, it may be necessary to purchase an externally powered USB-SATA device or have your system data migrated by a professional.

The Intel SSD is now connected. Proceed to [“Migrate Your Data” on page 5](#).

2. Migrate Your Data

This section explains how to migrate (transfer) your data from your current storage device to your new Intel SSD using Intel Data Migration Software.

Note: The migration process is identical for desktop and notebook computers.

If power is interrupted during the data migration process, unplug and reconnect the USB-to-SATA cable from the USB ports, and then start the data migration process again.

1. Make sure you have downloaded and saved the Intel Data Migration Software to your current storage device:

<http://www.intel.com/go/ssdinstallation>

Note: If the amount of data on your current storage device is greater than the capacity of the Intel SSD, the data migration will not complete. Remove unnecessary files or data from your current storage device to reduce its image size.

2. After downloading, double-click the Intel Data Migration Software icon to start the installation.
3. When the Intel Data Migration Software installation screen appears, choose **Install Intel® Data Migration Software**.

Figure 5 Intel Data Migration Software Installation screen



The Intel Data Migration Software wizard starts and guides you through the installation process.

4. Click **Next** to begin the installation.
5. Follow the prompts on the screen to complete the installation.

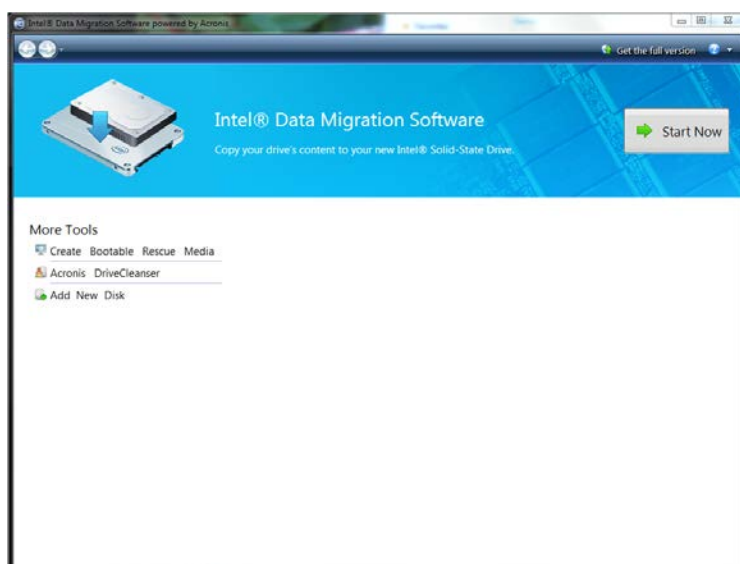
Note: When prompted for Setup Type, **Typical** is recommended.
6. Click **Close** when the installation completes.
7. Exit the Intel Data Migration Software screen, and proceed to the next section, [“Start the Software and Migrate Your Data” on page 6.](#)



Start the Software and Migrate Your Data

1. Double-click the Intel Data Migration Software shortcut icon on your desktop.
2. Complete the registration form when prompted, and then click **Register Now**.
After registering the software, the Intel Data Migration Software screen appears.

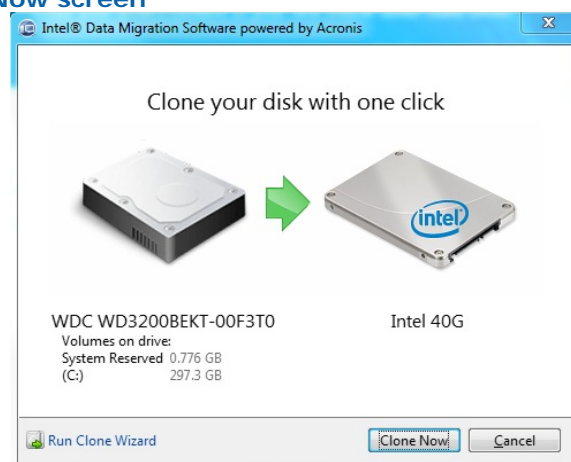
Figure 6 Intel Data Migration Software screen



3. Click **Start Now**.

Intel Data Migration Software automatically detects both drives, and the Clone Now screen appears.

Figure 7 Clone Now screen



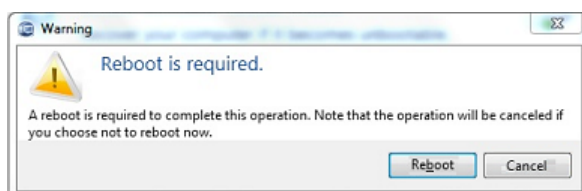
Intel Data Migration Software works with Intel SSDs only. If you receive an error message, make sure that you have an Intel SSD connected to your computer. If you have an Intel SSD connected to your computer and still receive an error message, contact Intel support. See [“Additional Support” on page 14](#).

Intel Data Migration Software identifies your SSD and verifies that the used space on your current storage device is the same or smaller than the available space on your SSD.

4. Click **Clone Now**.

The data migration starts. During this process, you will be prompted to reboot your computer.

Figure 8 Reboot screen



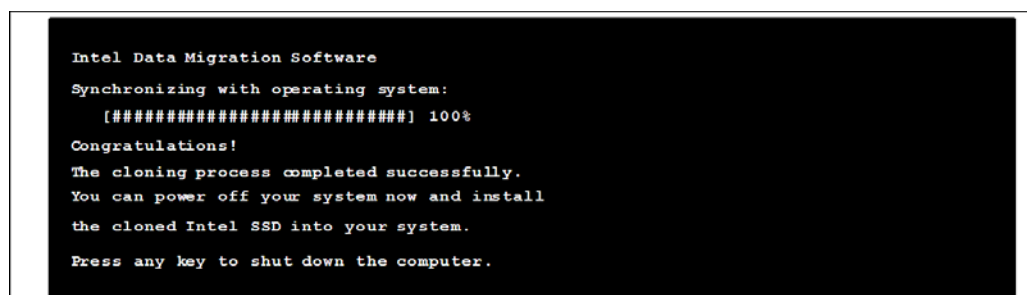
5. Click **Reboot**.

As your computer reboots, the migration process continues.

View the progress bar to see the status of the data migration. The length of the procedure corresponds to the amount of data on the drive being transferred.

6. Once the operation completes, shut down your computer when prompted. Proceed to **“Swap Your Drives”** on page 8.

Figure 9 Data Migration Successful screen





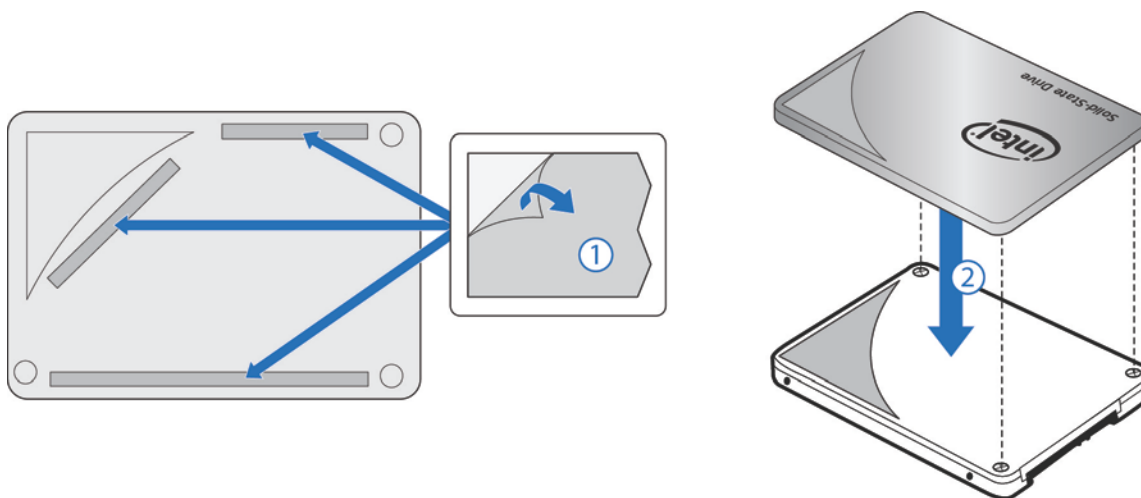
3. Swap Your Drives

After you have migrated your data onto the Intel SSD and shut down your computer, swap the placement of your current storage device with the new Intel SSD.

- For desktop computers:
 - You can either physically remove the current storage device and replace it with the Intel SSD (see [“Desktop Computers — Physically Swapping the Drives”](#)), or
 - Keep the storage device in your computer and change the boot order of the drives in the system BIOS to ensure that the computer boots from the Intel SSD (see [“Desktop Computers — Changing the Boot Order of the Drives”](#) on page 9).
- For notebook computers, remove the current storage device and replace it with the Intel SSD (see [“Notebook Computers — Swapping the Drives on page 9”](#)).

Note: If the notebook has a 9.5mm drive bay and no other drive attachments are included, then the Spacer should be attached to the Intel SSD. This will ensure the drive remains securely attached within the bay. Attach the Spacer using the adhesive backing after aligning the corners.

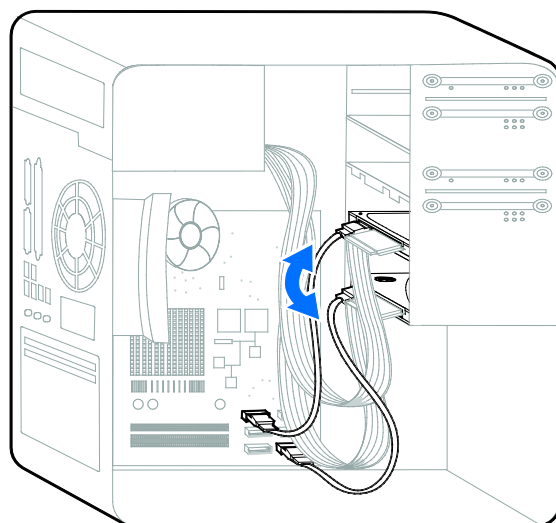
Figure 10 Attach Spacer to the Intel SSD



Desktop Computers — Physically Swapping the Drives

1. Make sure the computer is powered off.
2. Swap the SATA cable placement of the Intel SSD and your current storage device.

Figure 11 Swap drives



3. If desired, remove the current storage device.

Note: You may choose to keep your current storage device installed as a secondary or backup drive. However, make sure to configure the system BIOS and change the boot order so that the Intel SSD appears before your current storage device. See [“Desktop Computers — Changing the Boot Order of the Drives”](#) on page 9.

4. After swapping the drives, power on the computer.

As your computer boots to the Intel SSD for the first time, a notification that the data migration process completed successfully appears when the operating system starts.

Enjoy your new high-performing Intel Solid-State Drive!

Desktop Computers — Changing the Boot Order of the Drives

1. Close the computer case and start the computer.
2. While the computer is booting, enter the BIOS setup menu.
Press a special key such as ESC, F1, or DELETE to enter the BIOS menu. Check your computer manufacturer’s documentation for the correct key(s).
3. Go to the Boot or Startup screen and change the boot order so that the Intel SSD appears before your old storage device.
4. Save the settings and exit the BIOS setup menu.
5. Restart the computer.

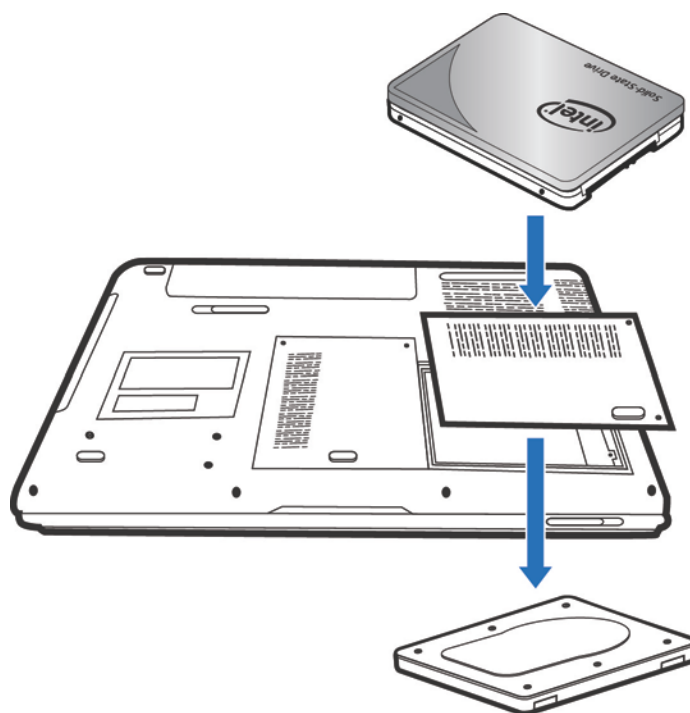
As your computer boots to the Intel SSD for the first time, a notification that the data migration process completed successfully appears when the operating system starts.
Enjoy your new high-performing Intel Solid-State Drive!



Notebook Computers — Swapping the Drives

1. Make sure the computer is powered off.
2. Remove the current storage device from the computer's drive bay.
Refer to your computer documentation for instructions on safely accessing the drive bay.
3. Remove any brackets or adaptors attached to the current storage device.
Not all storage devices have attached brackets or adaptors. If your device does, remove these and connect them in a similar manner to the Intel SSD.
4. Align the connector pins on the SSD with the SATA connector in the drive bay and slide the SSD into the drive opening.

Figure 12 Install Intel SSD in notebook



5. Replace the cover and power on the computer.

Note: You may choose to keep your old storage device as a secondary or backup drive by connecting it to the computer using the USB-to-SATA cable. Protect the old storage device with the drive sleeve included with certain packages. Install the drive sleeve with caution. Intel is not responsible for data loss or damage to system components.

As your computer boots to the Intel SSD for the first time, a notification that the data migration process completed successfully appears when the operating system starts.



4. Optimize and Maintain Your New Intel® SSD

Intel SSD® Toolbox

1. Download and save the latest version of the Intel SSD Toolbox software:

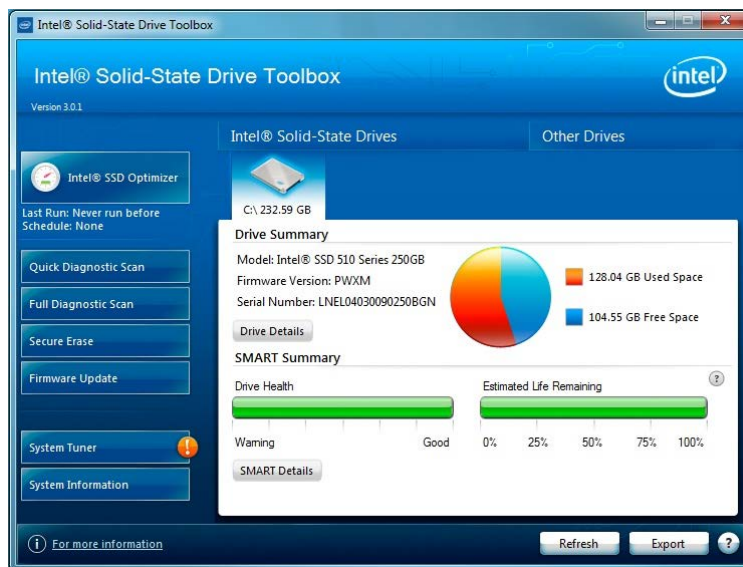
www.intel.com/go/ssdtoolbox

Note: The Intel SSD Toolbox contains a package of the latest firmware loads for Intel SSDs. When a new firmware update is released, it is embedded into a new version of the Intel SSD Toolbox. Therefore, it is recommended to occasionally check for newer versions of the Intel SSD Toolbox to download and install. This ensures access to the latest firmware versions for your Intel Solid-State Drive.

2. Install the Toolbox.



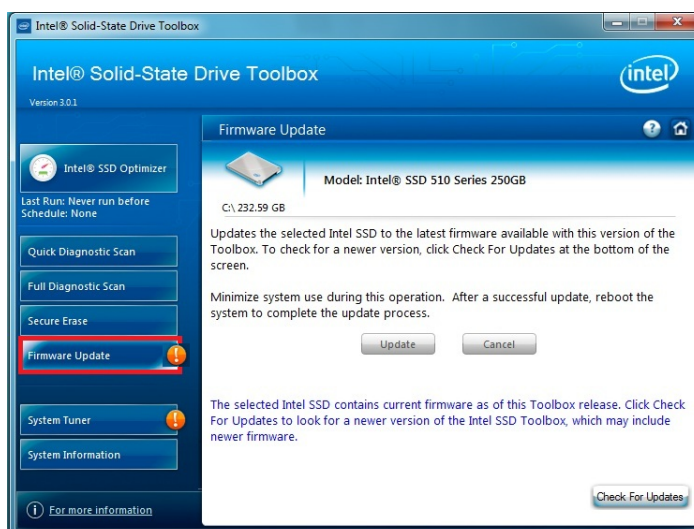
3. Run the Toolbox



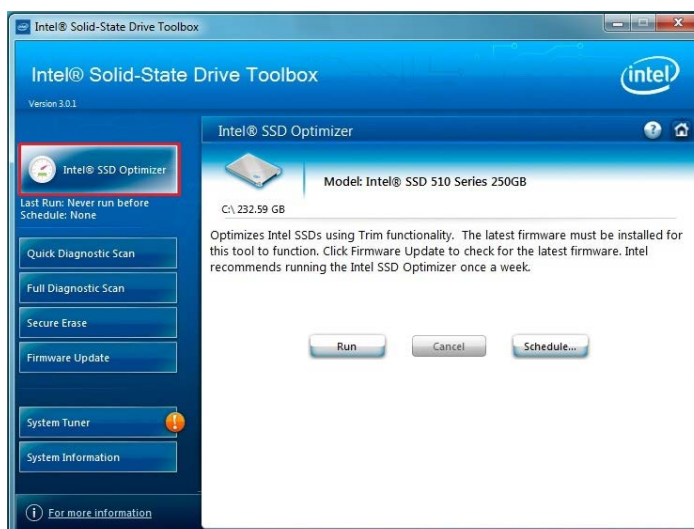


- a. Check for latest Intel SSD firmware updates and update to the most recent version if available.

Note: An orange circle with an exclamation point will appear by the Firmware Update button if a new version of firmware is available in this version of the Intel SSD Toolbox.

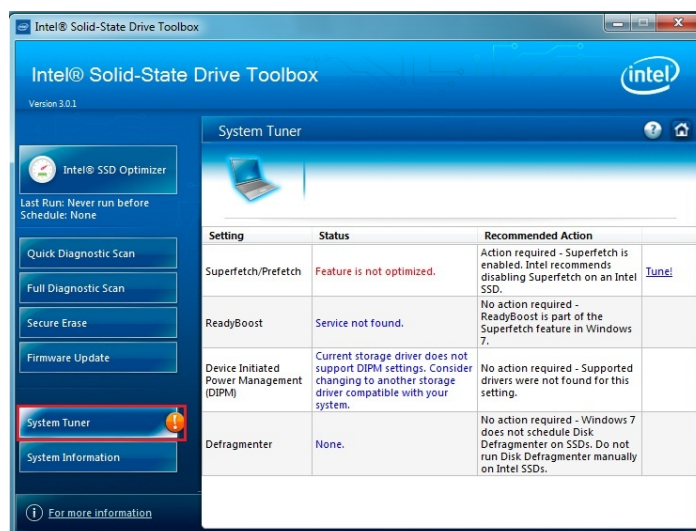


- b. For Microsoft Windows XP* and Vista* users: Optimize your new Intel SSD using Trim functionality with Intel® SSD Optimizer and schedule it to run regularly.

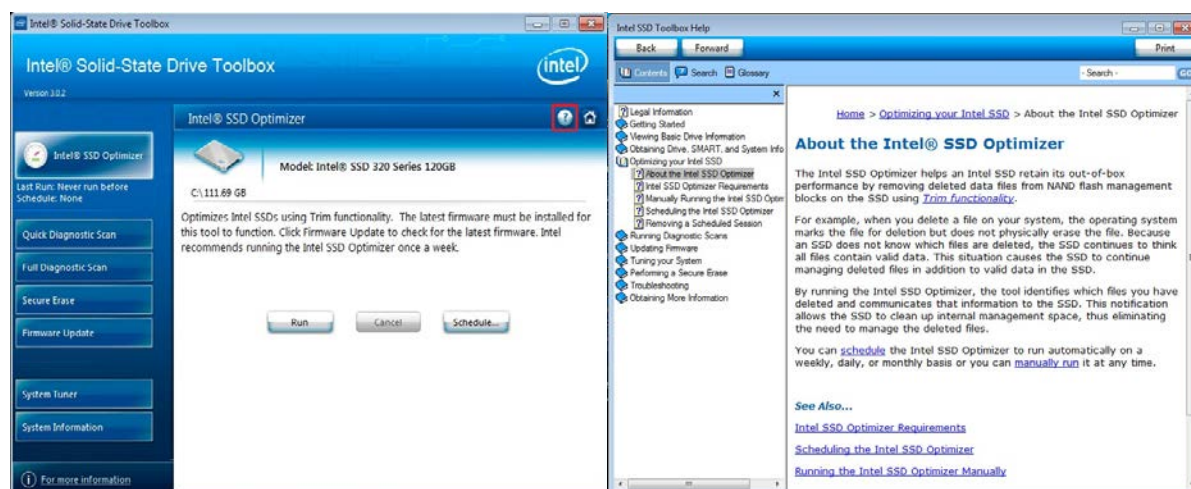


c. Run the system tuner to maximize Intel SSD performance.

Note: An orange circle with an exclamation point will appear by the System Tuner button if optimizations exist.



For more information on other Intel SSD Toolbox features and utilities, refer to the Help button and browse the content of your choosing.





Acronis AlignTool*

1. For maximum performance with your new Intel SSD in PCs using Microsoft Windows XP* or Server 2003*, download the Acronis AlignTool:

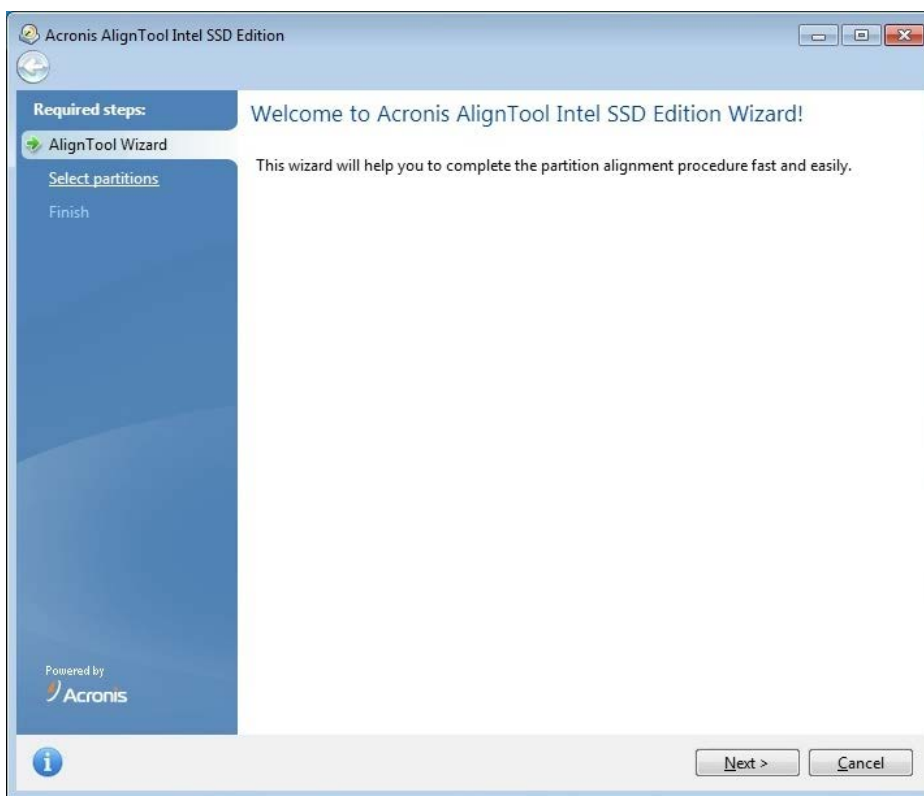
http://www.intel.com/support/go/windows_xp_alignment_tool.htm

This tool corrects partition misalignments that can occur during installations of Microsoft Windows XP & Server 2003. If you have installed Windows Vista*, Windows 7* or have an Intel Solid-State Drive 320 Series, you do not need to install and run the tool.

2. Install the AlignTool.



3. Run the AlignTool and follow the onscreen directions.



Additional Support

For more help with Intel SSDs, go to: <http://www.intel.com/support>

For more information about Intel SSDs, go to: <http://www.intel.com/go/ssd>

For instructional videos and to learn more about Intel SSDs, go to:

<http://www.intel.com/go/ssdfacbook>



Management Methods on Control of Pollution From Electronic Information Products
(China RoHS declaration)

产品中有害物质的名称及含量
Hazardous Substances Table

部件名称 (Parts)	有毒有害物质或元素 (Hazardous Substance)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
卡 Card	X	○	○	○	○	○
<p>○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。</p> <p>○: Indicates that this hazardous substance contained in all homogeneous materials of this part is below the limit requirement in SJ/T 11363-2006.</p> <p>×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求。</p> <p>×: Indicates that this hazardous substance contained in at least one of the homogeneous materials of this part is above the limit requirement in SJ/T 11363-2006.</p> <p>对销售之日的所售产品, 本表显示我公司供应链的电子信息产品可能包含这些物质。注意: 在所售产品中可能会也可能不会含有所有所列的部件。</p> <p>This table shows where these substances may be found in the supply chain of our electronic information products, as of the date of sale of the enclosed product. Note that some of the component types listed above may or may not be a part of the enclosed product.</p> <p>除非另外特别的标注, 此标志为针对所涉及产品的环保使用期限标志。某些可更换的零部件可能会有一个不同的环保使用期限(例如, 电池单元模块)。</p> <p>此环保使用期限只适用于产品在产品手册中所规定的条件下工作。</p> <div>  </div> <p>The Environment-Friendly Use Period (EFUP) for all enclosed products and their parts are per the symbol shown here, unless otherwise marked. Certain field-replaceable parts may have a different EFUP (for example, battery modules) number. The Environment-Friendly Use Period is valid only when the product is operated under the conditions defined in the product manual.</p>						



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